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(71) Applicant (for all designated States except US): CER-ESTAR HOLDING B.V. [NL/NL]; Nijverheidsstraat 1, P.O. Box 9, NL-4551 LA Sas van Gent (NL).

(72) Inventors; and
(75) Inventors/Applicants (for US only): VERCAUTEREN, Ronny, Leontina, Marcel [BE/BE]; Bergstraat 29, B-9120 Haasdonk (BE). HEYLEN, An, Amanda Jules [BE/BE]; Linterpoortenlaan 242, B-1980 Zemst (BE).

(74) Agent: WILKINSON, Stephen, John; Stevens, Hewlett & Perkins, 1 St Augustine's Place, Bristol BS1 4UD (GB).

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(54) Title: OXIDATION OF CARBOHYDRATES BY MEANS OF PEROXIDASES AND NITROXY RADICALS

(57) Abstract: A method of oxidising carbohydrates and/or carbohydrate derivatives having primary alcohol groups comprising contacting a reaction medium containing said carbohydrates and/or carbohydrate derivatives with a nitroxy radical mediator and a peroxidase enzyme, characterised in that the initial reaction medium contains at least 10% by weight carbohydrates and/or carbohydrate derivatives, in that the peroxidase enzyme is an oilseed peroxidase and in that a hydroperoxide and an alkali compound are gradually added to the reaction medium such that its pH is maintained at between 3.5 and 10.0 (pH-Stat); use of said method in a process for producing gluconic acid, glucaric acid and/or D-glucuronolactone.